CLAIMS:

1. An ultrasonic receiving apparatus comprising:

a light source for generating broadband light;

an ultrasonic detecting element including an ultrasonic sensing portion that expands and contracts in response to a received ultrasonic wave and has optical reflectance that changes in accordance with expansion and contraction thereby performing intensity modulation on the light generated by said light source;

spectrum-separating means for spectrum-separating the light intensity-modulated by said ultrasonic detecting element;

first photo-detecting means having a plurality of photoelectric conversion elements for detecting the light spectrum-separated by said spectrum-separating means for plural wavelength components, respectively; and

second photo-detecting means for detecting a selected wavelength component included in the light spectrum-separated by said spectrum-separating means on the basis of a detection result of said first photo-detecting means.

2. The ultrasonic receiving apparatus according to claim 1, further comprising adjusting means for adjusting an optical path between said spectrum-separating means and said second photo-detecting means on the basis of the detection result of said first photo-detecting means such that the selected wavelength component included in the light spectrum-separated by said spectrum-separating means enters said second

photo-detecting means.

3. The ultrasonic receiving apparatus according to claim 2, wherein said adjusting means adjusts an angle of said spectrum-separating means.

4. The ultrasonic receiving apparatus according to claim 2, further comprising:

a mirror for reflecting the light spectrum-separated by said spectrum-separating means;

wherein said adjusting means adjusts an angle of said mirror.

5. The ultrasonic receiving apparatus according to claim 1, wherein:

said ultrasonic detecting element is capable of detecting ultrasonic waves in a plurality of detection areas;

said spectrum-separating means simultaneously spectrum-separates a plurality of light beams respectively guided from the plurality of detection areas of said ultrasonic detecting element;

said first photo-detecting means detects the plurality of light beams spectrum-separated by said spectrum-separating means for respective wavelength components; and

said second photo-detecting means detects selected wavelength components respectively included in the light simultaneously spectrum-separated by said spectrum-separating means in parallel on the basis of the detection result of said first photo-detecting means.

6. The ultrasonic receiving apparatus according to claim

2, wherein:

said ultrasonic detecting element is capable of detecting ultrasonic waves in a plurality of detection areas;

said spectrum-separating means simultaneously spectrum-separates a plurality of light beams respectively guided from the plurality of detection areas of said ultrasonic detecting element;

said first photo-detecting means detects the plurality of light beams spectrum-separated by said spectrum-separating means for respective wavelength components; and

said second photo-detecting means detects selected wavelength components respectively included in the light simultaneously spectrum-separated by said spectrum-separating means in parallel on the basis of the detection result of said first photo-detecting means.

7. An ultrasonic receiving method comprising the steps of:

(a) obtaining relationship between wavelength and reflectance intensity of light in an ultrasonic detecting element including an ultrasonic sensing portion that expands and contracts in response to a received ultrasonic wave and has optical reflectance that changes in accordance with expansion and contraction thereby performing intensity modulation on entering light, by allowing the light to enter said ultrasonic detecting element, spectrum-separating the light intensity-modulated by said ultrasonic detecting element, and detecting the spectrum-separated light for plural wavelength components by using first photo-detecting

means having a plurality of photoelectric conversion elements, respectively;

(b) adjusting an optical path of a selected wavelength component included in the light spectrum-separated by said spectrum-separating means on the basis of the relationship obtained at step (a) such that the selected wavelength component is outputted in a predetermined direction; and

(c) obtaining information on the ultrasonic wave received by said ultrasonic detecting element by allowing the wavelength component outputted in the predetermined direction at step (b) to enter second photo-detecting means and detecting the wavelength component.